



west virginia department of environmental protection

Division of Water and Waste Management
601 57th Street SE
Charleston, WV 25304
Phone Number: (304) 926-0495
Fax Number: (304) 926-0463

Austin Caperton, Cabinet Secretary
www.dcp.wv.gov

July 30, 2018

Jeff Swertfeger, Superintendent
Greater Cincinnati Water Works
4747 Spring Grove Ave.
Cincinnati, WV 45232

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Re: WV/NPDES Permit No. WV0001279
Chemours Company – Washington Works

Dear Mr. Swertfeger:

This correspondence is in response to your comment letter dated May 18, 2018 regarding WV/NPDES Water Pollution Control Permit No. WV0001279 for the Chemours' Washington Works facility located in Washington, WV. Comments are summarized, followed by the agency's response.

Comment 1: GCWW requests WVDEP establish an additional limitation for the total PFOA and HFPO-DA discharged from the entire facility.

The agency has imposed limitations for PFOA and HFPO-DA at each point source in which a reasonable potential to exceed the instream water quality criteria exists. This is consistent with both State and Federal regulations under the WV/NPDES program and the agency believes that the limitations imposed are protective of the water quality standards and designated uses of the Ohio River. As such, a total site limitation is neither appropriate nor necessary. No revision to the permit has been made.

Comment 2: We request that the reporting in pounds-per-day basis for PFOA and HFPO-DA at Outlet 005 be changed from reporting to and actual limit.

The fact sheet does not indicate "masking" is a concern for PFOA and HFPO-DA at Outlet 005. The fact sheet indicates that the large amount of non-contact cooling water is a masking concern for compliance monitoring of process wastewater discharges at Internal Outlets 102, 205, 305, 405, 505, and 605 which are regulated by technology-based

Promoting a healthy environment.

limitations prescribed by 40 CFR 414 (Organic Chemicals, Plastics, and Synthetic Fibers Point Source Category) for Total Suspended Solids and Biological Oxygen Demand (BOD5). Effluent Limitation Guidelines (ELGs) such as imposed in the permit do not allow the use of dilution water (such as used for non-contact cooling) to achieve the minimum treatment levels prescribed by the regulations. Conversely, PFOA and HFPO-DA limitations are water-quality based effluent limitations which are imposed to protect a concentration-based instream criterion at the edge of a default mixing zone (i.e. dilution). As such, the agency believes the limitations imposed are appropriate and no revisions to the permit have been made.

Comment 3: GCWW requests that a clause be added to Section C that allows WVDEP to reopen and revise the discharge limitations for HFPO-DA based on evolving health-based exposure guidance.

All WV/NPDES permits contain a “re-opener” clause found in Appendix A of the permit, specifically Parts I.4, I.8, and I.11 based on Chapter 22-11-12 of the Code of West Virginia. The permit can be reopened if new information regarding the protection human health for PFOA and/or HFPO-DA becomes available. Therefore, no additional requirements to the permit are necessary.

Comment 4: GCWW requests that a clause be added to Section C that requires Chemours to notify the WVDEP and downstream drinking water utilities of any plans to switch compounds from HFPO-DA, or the discharge or any other per- or polyfluoroalkyl substances (PFAS), or discharge of any other compounds that replace HFPO-DA.

The permittee did not submit any information or claim the use of byproduct/residual generation and/or disposal of any perfluorinated substances (PFAS) other than PFOA or HFPO-DA. As such, the agency did not review or act on these chemicals and therefore the disposal and discharge via any permitted outlet is not authorized by the permit. As such, the permittee must apply for a major permit modification to dispose and discharge any additional PFAS substances. A major permit modification requires a 30-day public comment period. Section C.34 has been added to the permit to clarify the requirements for the use, disposal, and/or degradation of additional PFAS substances.

Comment 5: GCWW requests that conditions be placed in the permit that requires Chemours to directly notify downstream utilities under certain circumstances.

Appendix A, IV.2 requires immediate reporting to the Agency’s designated spill alert telephone number. The spill alert hotline is operated 24 hours a day by WVDEP Environmental Enforcement personnel which is tasked with coordinating responses to spills which may endanger human health or the environment including potential impact to drinking water utilities. The agency believes that this is the appropriate reporting procedure and that additional / direct reporting could potentially cause confusion in non-emergency situations. As such, the agency believes the current requirements are appropriate and no revision to the permit has been made.

Comment 6: GCWW requests Chemours be required to reimburse any requesting downstream drinking water utility for the laboratory analyses for PFOA and HFPO-DA, or any replacement compounds, for up to 3 analyses per month starting with the effective date of the permit and continuing through the period out time that Chemours evaluates, designs, installs and test the new treatment system.

The WV/NPDES program does not provide a mechanism for utilities to seek reimbursement for any incurred costs. However, such reimbursement may possibly be sought through other legal means.

Comment 7: GCWW requests that as part of Section B representatives of Chemours be required to present, in person, the findings of their evaluation of wastewater treatment technologies and the draft design of their waste-minimization strategies and wastewater treatment system to the Water Users Advisory Committee (WUAC) of ORSANCO.

This type of requirement is not applicable in a WV/NPDES permit. In addition, WVDEP cannot speak for the Water Users Advisory Committee nor request that the permittee appear before the committee to present their findings. The agency recommends that GCWW or WUQC contact Chemours directly to pursue any such requests.

However, please note that the permittee must apply for a major permit modification as may be necessary prior to any material or substantial alteration or addition to the permitted facility (including proposed installation of wastewater treatment technologies) or activity that justify the application of permit conditions that are different or absent in the existing permit. Approval of a major permit modification requires a 30-day public comment period. Also, any documentation such as progress reports submitted by the permittee is / will be available via a Freedom of Information Act (FOIA) request.

Comment 8: GCWW requests that Chemours be required to provide background information and treatability information for any discharged chemicals to downstream drinking water utilities upon request.

This type of requirement is not applicable in a WV/NPDES permit. The agency suggests that any downstream drinking water utility that desires information on the treatability of any discharged chemicals from the permittee's operations contact the permittee directly.

Comment 9: GCWW requests that as a special condition in the permit, that Chemours be required to provide upon request, an inventory of onsite chemical storage for any chemicals in quantities greater than 250 gallons to any downstream drinking water utilities (or ORSANCO) on an annual basis.

The Aboveground Storage Tank Act was promulgated in 2014 by the State of West Virginia which includes requirements for inventory and registration of all existing aboveground storage tanks. The Act also requires certification of annual inspection for Level 1 and Level 2 tanks, which are tanks within "zones of critical concern". Information on the registered

tanks are available to the public and public utilities through a Freedom of Information Act request.


Comment 10: GCWW requests, like PFOA, the permit specify that a storm water benchmark waiver does not apply to HFPO-DA. A benchmark value for HFPO-DA should be established and included in the permit.

The agency determined that the minimum required ecotoxicological data to generate a storm water benchmark was not available for HFPO-DA at permit draft time. Therefore, a benchmark value was not established in the permit for HFPO-DA. If information becomes available at the next reissuance of the permit, the agency will generate and impose a storm water benchmark at that time.

Since a benchmark has not been developed in Section C.14 for HFPO-DA, the permittee cannot claim the waiver of monitoring requirements for this substance at any time. Section C.14 has been revised in the final permit to clarify this.

Again, the agency would like to thank you for your comments on draft WV/NPDES No. WV0001279. The Division of Water and Waste Management issued WV/NPDES Permit No. WV0001279 on July 30, 2018. Within 30 days of the issuance date of this permit, anyone who may be adversely affected or aggrieved by the permit terms and conditions may file a Notice of Appeal with the Environmental Quality Board, 601 57th Street SE, Charleston, West Virginia 25304. Telephone (304) 926-0445. Thank you for your interest in this application.

Sincerely,

A handwritten signature in black ink, appearing to read 'Scott G. Mandirola', is written over a horizontal line.

Scott G. Mandirola
Director

SGM:jvl

cc: Env. Inspector Supervisor
EPA Region III



May 18, 2018

RECEIVED

MAY 18 2018

Director, Division of Water and Waste Management, DEP
ATTN: Lori Devereux, Permitting Section
601 57th Street SE
Charleston, West Virginia 25304-2345

Re: Draft NPDES Permit No. WV0001279, The Chemours Company FC, LLC, Washington, WV

The Greater Cincinnati Water Works (GCWW) is pleased to provide comments and concerns regarding the draft National Pollutant Discharge Elimination System (NPDES) water pollution control permit number WV0001279.

The Chemours Company FC, LLC (Chemours), located in Washington, West Virginia, is located approximately 273 miles upstream of the GCWW intake on the Ohio River. As a public drinking water supplier, GCWW draws approximately 110 million gallons per day (MGD) from the Ohio River. In addition to serving as an economic driver and a vital transportation corridor, the Ohio River is the source of drinking water for over 6 million people. All the various uses of the river must be balanced with the public health of the people who rely on the Ohio River as their source of potable water.

GCWW is very interested and concerned about discharges from this facility given the past discharges from the subject facility and from a similar Chemours facility in North Carolina. Furthermore, discharges from the Chemours facility have been shown to be a major source of perfluorooctanoic acid (PFOA) in the Ohio River. Herrick, et al. (2017)¹ reported that discharges of PFOA from this facility accounted for elevated PFOA levels in the blood serum of people hundreds of miles downstream with some communities showing blood levels being many times the national average. Likewise, the background information provided with the draft permit indicates that large quantities of the PFOA replacement chemical, HFPO-Dimer Acid or GenX (herein referred to as HFPO-DA(GenX)) have also been discharged from this facility in the recent past.

While specific comments and concerns regarding details of the permit are provided in the following sections, GCWW nonetheless supports the continued use of the best available human health-based values in establishing the discharge limitations for all compounds discharged from this facility but especially for PFOA and HFPO-DA(GenX), including the Health Advisory Level (HAL) of 70 ng/L for PFOA and the use the North Carolina standards for HFPO-DA(GenX). We urge WV DEP to evaluate all available health-based standards for PFOA including the limits established by the State of New Jersey

¹ Herrick, R. L., Buckholz, J., Biro, F. M., Calafat, A. M., Ye, X., Xie, C., & Pinney, S. M. (2017). Polyfluoroalkyl substance exposure in the Mid-Ohio River Valley, 1991-2012.. Environmental Pollution (Barking, Essex : 1987), 228, 50-60. doi:10.1016/j.envpol.2017.04.092



and the State of Vermont standards (i.e., 14 and 20 ng/L respectively) when establishing the final or any future effluent limitations.

In addition to the discharge limitations for PFOA and HFPO-DA(GenX), GCWW is also very concerned about the potential for Chemours to discharge other perfluorinated substances not currently identified in the draft permit. This situation has been reported by Sun, et al. (2016)² in Cape Fear, NC where many perfluorinated compounds have been detected originating from that Chemours facility and showing up in downstream drinking water supplies. Given that perfluorinated substances are poorly degradable in the environment and have been linked to several human health impacts, a release of these substances may present an imminent and substantial endangerment to health and environment and would therefore be illegal under the Resource Conservation and Recovery Act (RCRA) and the Clean Water Act (CWA).

Specific comments and concerns for the draft permit are provided below:

Comment 1

GCWW requests that, in addition to the reporting requirements and discharge limits established for individual outlets in the draft permit, that WV DEP establish an additional limitation for the total PFOA and HFPO-DA(GenX) discharged from the entire facility. Specifically, we request that the WV DEP cap and regulate the total loading in pounds per day of these two compounds to the Ohio River from this facility. Further, we request that WV DEP also impose a maximum discharge concentration (i.e., maximum ng/L) for the facility as well to avoid "slugs" of higher concentrations of PFOA and HFPO-DA(GenX). The limit of the total loading from the entire site should likewise utilize available standards such as the USEPA Health Advisory Level, or the levels established by New Jersey and Vermont for PFOA and the North Carolina Standard for HFPO-DA(GenX) as the basis for the total site limitation.

Comment 2

In recognition of WV DEP's concerns regarding non-contact cooling water "masking" true contaminant loading through Outlet 005 (page 22 of the Fact Sheet under the rationale for establishing the effluent limitations for Outlet 005), GCWW requests that, in addition to the flow quantity restrictions limiting the amount of cooling water introduced and the concentration-based limits (i.e., ng/L) for PFOA and HFPO(GenX), a mass-based limit (i.e., maximum total pounds per day) also be assigned for this outlet if this masking effect extends beyond TSS and BOD. The draft permit currently requires reporting on a pounds-per-day basis for PFOA and HFPO-DA(GenX) at Outlet 005; we request that requirement be changed from reporting to an actual limit. We believe this will, in part, further limit the "masking" effect of the non-contact cooling water on PFOA and HFPO-DA(GenX) and provide an additional layer of protection for downstream drinking water utilities.

Comment 3

GCWW requests that a clause be added to *Section C – Other Requirements* that allows the WV DEP to reopen and revise the discharge limitations for HFPO-DA(GenX) based on evolving health-based exposure guidance. The values used in the draft permit are based on the current North Carolina

² Sun, et al., 2016. "Legacy and Emerging Perfluoroalkyl Substances Are Important Drinking Water Contaminants in the Cape Fear River Watershed of North Carolina." *Environ. Sci. Technol. Lett.*, 2016, 3 (12), pp 415-419

exposure guidelines and the permit fact sheet recognizes that additional research regarding HFPO-DA(GenX) is ongoing. Consumers of Ohio River drinking water should not be forced to wait until the next permit renewal cycle for lower limits if new health-based exposure guidelines are established.

Comment 4

GCWW requests that an additional condition be added to *Section C – Other Requirements* that requires Chemours to notify the WV DEP and downstream drinking water utilities of any plans to switch compounds from HFPO-DA(GenX), or the discharge of any other per- or polyfluoroalkyl substances (PFAS), or discharge of any other compounds that replace HFPO-DA(GenX). GCWW is concerned that any such replacement compounds would have similar harmful and adverse effects on the environmental and human health as HFPO-DA(GenX) and that the discharge of such substances prior to the establishment of limits would result in violation of the CWA and the water quality standards for West Virginia, Title 47CRS2. Because the discharge of any substitute HFPO-DA(GenX) substances may present an imminent and substantial endangerment to health or the environment, such a discharge without express authorization under the NPDES permit would also constitute a violation of RCRA. See 42 U.S.C. § 6901 et. seq. As such, we request that the use of any additional PFAS in addition to, or in replacement of, HFPO-DA(GenX) be prohibited until specifically approved by the WV DEP after a suitable public comment period. Finally, we request that WV DEP and downstream drinking water utilities be notified by Chemours if any additional PFAS in addition to PFOA are detected in the wastewater or are being discharged from the site.

Comment 5

GCWW requests that, in addition to the required spill notification included in the draft permit, that Chemours be required to directly notify downstream utilities immediately of any spills that reach the Ohio River, or its tributaries, or any discharges through any of the outlets exceeding twice the permitted limits. Notification to any drinking water utilities intakes within 50 miles downstream should be made via telephone whereas utilities with intakes greater than 50 miles downstream may be notified via email to a contact provided by the utility to Chemours. In lieu of contacting utilities directly, Chemours could contact the Ohio River Valley Water Sanitation Commission (ORSANCO) which would then disseminate the information to utilities via its existing notification program.

Comment 6

GCWW requests that Chemours be required to reimburse any requesting downstream drinking water utility for the laboratory analyses for PFOA and HFPO-DA(GenX), or any replacement compounds, for up to 3 analyses per month starting with the effective date of the permit and continuing through the period of time that Chemours evaluates, designs, installs and tests the new treatment system. Reimbursement will continue until the WV DEP has determined, through performance testing and not through modelled or calculated efficiencies, that the new treatment system consistently reduces the PFOA and HFPO-DA(GenX) concentrations to below the permit limits.

Comment 7

GCWW requests that, as part of *Section B. Schedule of Compliance* (Pages 70 and 71 of the draft permit), representatives of Chemours be required to present, in person, the findings of their evaluation of wastewater treatment technologies and the draft design of their waste-minimization strategies and wastewater treatment system to the Water Users Advisory Committee (WUAC) of ORSANCO. The presentation must be made prior to WV DEP's final approval of that system. The WUAC meets three times a year, typically in January, May, and September. The committee is comprised predominantly of drinking water utilities who withdraw water from the Ohio River. These utilities should be allowed to provide comments and concerns to the WV DEP before final approval is made. While the WUAC has no regulatory standing relative to the approval of any proposed wastewater treatment strategies, it is nonetheless, the primary stakeholder group affected by the discharges of PFAS at the Chemours facility and, as such, should be included in the final decisions.

Comment 8

GCWW requests that Chemours be required to provide background information and treatability information for any discharged chemicals to downstream drinking water utilities upon request. This information must be provided immediately in the event the request is made in response to a spill or discharge in excess of the permit limitations.

Comment 9

GCWW requests that, as a special condition of this permit, that Chemours be required to provide upon request, an inventory of onsite chemical storage for any chemicals in quantities greater than 250 gallons to any downstream drinking water utilities. That chemical storage inventory should be updated and provided to the utilities on an annual basis. In lieu of contacting utilities directly, Chemours may supply this information to the ORSANCO which would then disseminate the information to utilities.

Comment 10

Item 14 of Section C – Other Requirement, paragraph c allows waivers for storm water monitoring for multiple chemicals at 12 storm water outlets if the concentrations are below the corresponding benchmark value for 4 consecutive quarters. The monitoring waiver does not, however, apply to PFOA monitoring. GCWW requests that, like PFOA, the permit specifies that the waiver does not apply to HFPO-DA(GenX). Item 14 also includes a table with benchmark values; that table does not include a value for HFPO-DEA(GenX) even though that compound is included in the monitoring requirements. If appropriate, a benchmark value for HFPO-DA(GenX) should be established and included in the permit.

Thank you for your attention to this matter. Please let me know if we can be of any assistance.

Sincerely,



Jeff Swertfeger
Superintendent
Water Quality and Treatment Division
Greater Cincinnati Water Works